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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,881	11/13/2003	Yoshimasa Nagakura	032105	6093

38834 7590 07/03/2006

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EXAMINER

SCHILLINGER, LAURA M

ART UNIT	PAPER NUMBER
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2813

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,881

Applicant(s)

NAGAKURA ET AL.

Examiner

Laura M. Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 5-12, 14-16, 18-20, 22-24, 26-28, 30-32 and 34-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 13, 17, 21, 25, 29 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

Newly submitted claim 37 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 37 pertains to reducing pressure without introduction of a raw material; in contrast the originally elected claims are drawn to a pressure reduction with the introduction of an inert atmosphere. Therefore, claim 37 pertains to a separate and distinct species from that of the originally elected claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 37 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 13, 17, 21, 25, 29, 33 rejected under 35 U.S.C. 102(a) as being anticipated by Japanese Publication 2001338976.

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1. A method for fabricating a semiconductor device comprising :
the step of depositing an insulation film with a first pressure set in a deposition chamber;
the pressure adjusting step of decreasing a pressure gradually in the deposition chamber from a first pressure to a second pressure which lower than the first pressure ; and the step of further depositing the insulation film with the second pressure set in the deposition chamber (Abstract, Solution-drawing 18).
2. A method for fabricating a semiconductor device according to claim wherein the pressure adjusting step, pressure the deposition chamber is gradually decreased from the first pressure the second pressure while an atmosphere in the deposition chamber is being replaced by an inert atmosphere[0041].
3. A method for fabricating a according to claim 1, wherein in the pressure adjusting step, semiconductor device pressure in the deposition chamber is gradually decreased at a rate smaller than 40 Torr/sec [0041- drawing 18].
4. A method for fabricating a semiconductor device according claim 3, wherein in the pressure adjusting step, pressure in the deposition chamber is gradually decreased at a 5 - 40 Torr/sec [0041- drawing 18].
13. A method for fabricating a semiconductor device according to claim which further comprises, before the step of depositing the insulation film, the step of forming a gate electrode

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of a transistor on a semiconductor substrate; and in which in the step of depositing the insulation film, the insulation film is deposited so as to cover the gate electrode[0037].

17. A method for fabricating a semiconductor device according to claim 1, which further comprises, before the step of depositing the insulation film, step of forming an interconnection layer above the semiconductor substrate [0037]; and

in which in the step of depositing the insulation film, the insulation film deposited so as to cover the interconnection layer[0038].

21. A method for fabricating a semiconductor device according to claim 1, wherein the first pressure is 400 - 600 Torr [0040]; and the second pressure is 200 - 400 Torr [0041].

25. A method for fabricating a semiconductor device according to claim wherein the step of depositing the insulation film, insulation film deposited by thermal chemical vapor deposition (Abstract, Solution).

29. A method for fabricating a semiconductor device according to claim 1, wherein the insulation film is a BPSG film, a BSG film, a PSG film or an USG film [0040].

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33. A method for fabricating a semiconductor device according to claim 1, further comprising, after the step of further depositing the insulation film, the step of polishing the surface of the insulation film [0041].

Response to Arguments

Applicant's arguments filed 1/25/06 have been fully considered but they are not persuasive. Applicant argues that the 2001-338976 reference fails to teach gradually decreasing the pressure- this argument is not persuasive- See the top of page 6 of 10- teaching to decrease the pressure. Moreover, See drawing 18 showing the pressure decrease as a function of nm/min. This demonstrates the reduction in pressure is "gradual".

Conclusion

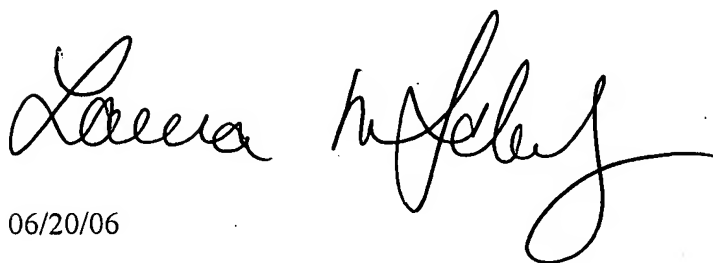
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Laura M. Schillinger', with a long, sweeping horizontal stroke extending to the right.

Laura M Schillinger
Primary Examiner
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06/20/06